

UNIVERSITY  
of  
OTAGO



*Te Whare Wānanga o Otāgo*

## The 10<sup>th</sup> Annual Carney Pharmacogenomics Symposium

**Christchurch**  
**Monday 3<sup>rd</sup> November, 2014**



*Beaven Lecture Theatre, Seventh Floor, University of Otago  
Building—Christchurch Hospital, 1 Riccarton Avenue, Christchurch*

### **Programme**



# Venue:

*Beaven Lecture Theatre, Seventh Floor, University of Otago Building—Christchurch Hospital, 1 Riccarton Avenue, Christchurch*

Located within the Public Hospital.



<b>9:00am</b>		<b>Meet over coffee</b>	
		<b>Session 1 Chair: Martin Kennedy</b>	
9:20am	Welcome - Martin Kennedy		
9:30am	<b>Dr Matthew Strother</b> , Christchurch Hospital, Clinical perspective on 5-fluorouracil and it's variability of outcomes.		
9:45am	<b>Ottiniel Chavani</b> , <i>Christchurch Hospital</i> , 5 fluorouracil analysis.		
10:00am	<b>Dr Nuala Helsby</b> , <i>University of Auckland</i> , Impact of pharmacogenetics on 5-fluorouracil therapy.		
<b>10:30am</b>		<b>Morning Tea</b>	
		<b>Session 2 Chair: Evan Begg</b>	
11:00am	<b>Prof. Lisa Stamp</b> , <i>Christchurch Hospital &amp; University of Otago</i> . Pharmacogenetics of gout.		
11:30am	<b>Prof Murray Barclay</b> , <i>University of Otago, Christchurch</i> . Mathematical model of the thiopurine metabolic pathway incorporating pharmacogenetics.		
11:45am	<b>Prof Margreet Vissers</b> , <i>University of Otago, Christchurch</i> . Vitamin C for Cancer – New mechanisms controlling gene expression.		
12:00pm	<b>Dr Amy Fletcher</b> , <i>University of Canterbury, Christchurch</i> . Bringing Personalized Medicine into M.S. Treatment: The Intersection of Science, Patients and Politics.		
12:15pm	<b>Dr Simone Cree</b> , <i>University of Otago, Christchurch</i> . Initial experiences with the Oxford Nanopore MinIon DNA sequencing device.		
<b>12:30pm</b>		<b>Lunch</b>	
		<b>Session 3 Chair: Nuala Helsby</b>	
1:30pm	<b>Assoc. Prof. Matthew Doogue</b> , <i>Christchurch Hospital &amp; University of Otago, Christchurch</i> . Liver Transplant Donor and Recipient CYP3A5 and ABCB1 Genetics and Tacrolimus Pharmacokinetics.		
1:45pm	<b>Dr James Foulds</b> , <i>University of Otago, Christchurch</i> . <i>OPRM1</i> genotype and naltrexone treatment outcome in depressed alcohol dependent patients		
2:00pm	<b>Diana Balasubramanain</b> , <i>University of Otago, Christchurch</i> . RNA-seq expression analysis of lithium and valproate exposure in a serotonergic precursor cell line.		
2:15pm	<b>Prof. Martin Kennedy</b> , <i>University of Otago, Christchurch</i> . Genomic tools for analysis of adverse drug reactions.		
2:30pm	<b>Kim Ton</b> , <i>University of Otago, Christchurch</i> . Developing a next-generation sequencing multiplexed assay for multiple pharmacogenes.		
2:45pm	<b>Dr Simran Maggo</b> , <i>University of Otago, Christchurch</i> . Gentamicin ototoxicity, pharmacogenetic link?		
3:00pm	<b>Richman Wee</b> , <i>University of Otago, Christchurch</i> . Biobanking & Pharmacogenetics		
<b>3:15pm</b>		<b>Afternoon Tea and close</b>	

## Origins of the Centre

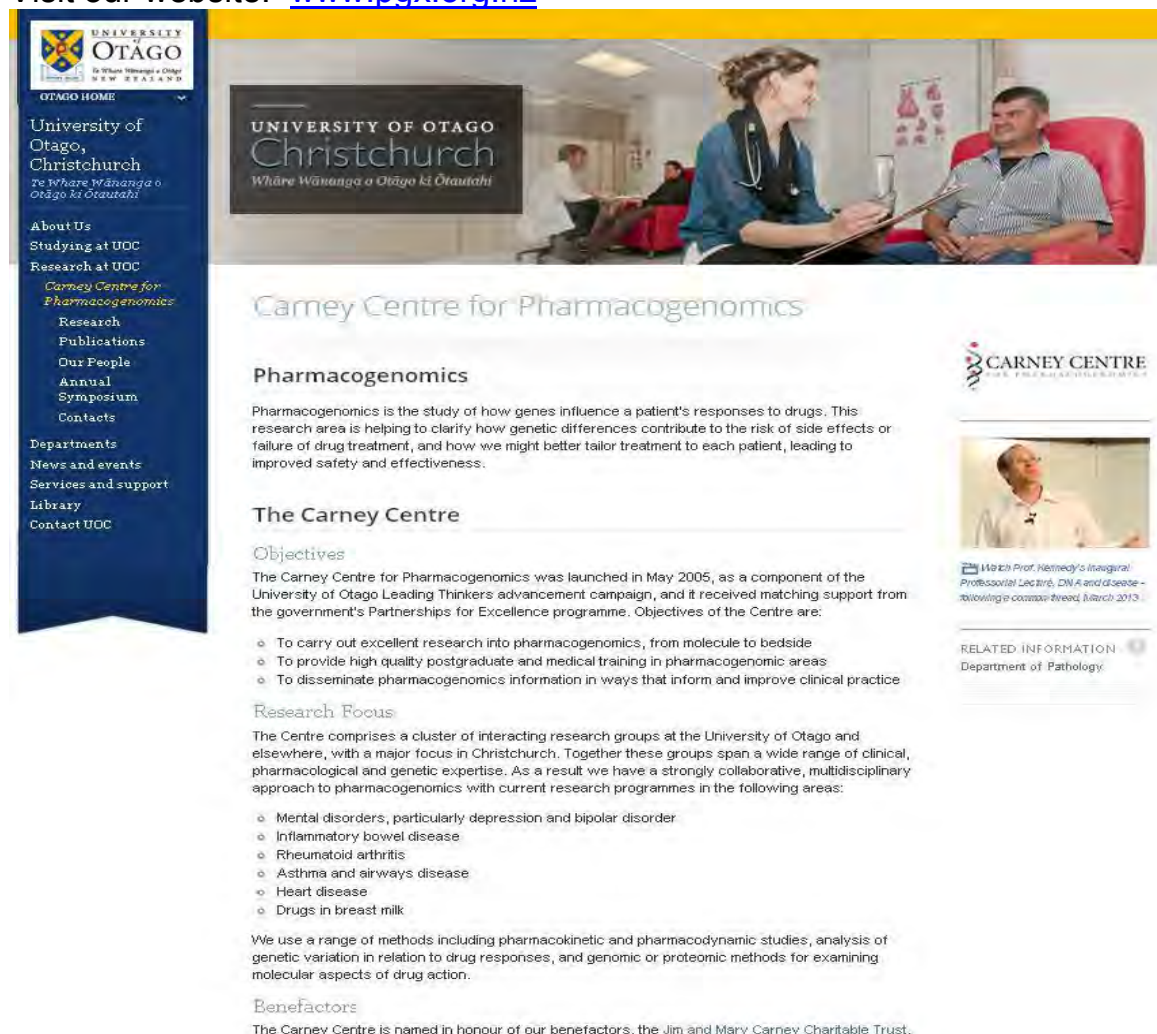
The Carney Centre for Pharmacogenomics was established with a generous gift from the Jim and Mary Carney Charitable Trust, which was matched by the Government under the Partnerships for Excellence scheme. The Centre was opened in May 2005, and brings together several groups throughout the University of Otago and elsewhere. Together these groups span a wide range of clinical, pharmacological and genetic expertise, and they are applying genetic and genomic techniques to the understanding of drug action and drug responses.

## Objectives of the Centre:

- To carry out excellent research into pharmacogenomics, from molecule to bedside
- To provide high quality postgraduate and medical training in pharmacogenomic areas
- To disseminate pharmacogenomics information in ways that inform and improve clinical practice

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Visit our website: [www.pgx.org.nz](http://www.pgx.org.nz)



**University of Otago**  
Te Whare Wānanga o Ōtago ki Ōtautahi

**Carney Centre for Pharmacogenomics**

### Pharmacogenomics

Pharmacogenomics is the study of how genes influence a patient's responses to drugs. This research area is helping to clarify how genetic differences contribute to the risk of side effects or failure of drug treatment, and how we might better tailor treatment to each patient, leading to improved safety and effectiveness.

### The Carney Centre

#### Objectives

The Carney Centre for Pharmacogenomics was launched in May 2005, as a component of the University of Otago Leading Thinkers advancement campaign, and it received matching support from the government's Partnerships for Excellence programme. Objectives of the Centre are:

- To carry out excellent research into pharmacogenomics, from molecule to bedside
- To provide high quality postgraduate and medical training in pharmacogenomic areas
- To disseminate pharmacogenomics information in ways that inform and improve clinical practice

#### Research Focus

The Centre comprises a cluster of interacting research groups at the University of Otago and elsewhere, with a major focus in Christchurch. Together these groups span a wide range of clinical, pharmacological and genetic expertise. As a result we have a strongly collaborative, multidisciplinary approach to pharmacogenomics with current research programmes in the following areas:

- Mental disorders, particularly depression and bipolar disorder
- Inflammatory bowel disease
- Rheumatoid arthritis
- Asthma and airways disease
- Heart disease
- Drugs in breast milk

We use a range of methods including pharmacokinetic and pharmacodynamic studies, analysis of genetic variation in relation to drug responses, and genomic or proteomic methods for examining molecular aspects of drug action.

#### Benefactors

The Carney Centre is named in honour of our benefactors, the Jim and Mary Carney Charitable Trust.

**March Prof. Kennedy's Inaugural Professional Lecture, DN A and disease – following a career break, March 2013**

RELATED INFORMATION  
Department of Pathology